

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
25 August 2005 (25.08.2005)

PCT

(10) International Publication Number
WO 2005/078121 A1

(51) International Patent Classification⁷: C12Q 1/68, C12P 19/34

(21) International Application Number:
PCT/CA2005/000211

(22) International Filing Date: 18 February 2005 (18.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/545,732 18 February 2004 (18.02.2004) US

(71) Applicant (for all designated States except US): CEN-
TRE FOR ADDICTION AND MENTAL HEALTH
[CA/CA]; 33 Russell Street, Toronto, Ontario M5S 2S1
(CA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): PETRONIS, Ar-
turus [CA/CA]; 250 College Street, Toronto, Ontario
M5T 1R8 (CA). SCHUMACHER, Axel[†] [DE/CA]; 328
Brunswick Avenue, Toronto, Ontario M5R 2Y9 (CA).

(74) Agents: SECHLEY, Konrad, S. et al.; Gowling Lafleur
Henderson LLP, 160 Elgin Street, Suite 2600, Ottawa, On-
tario K1P 1C3 (CA).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

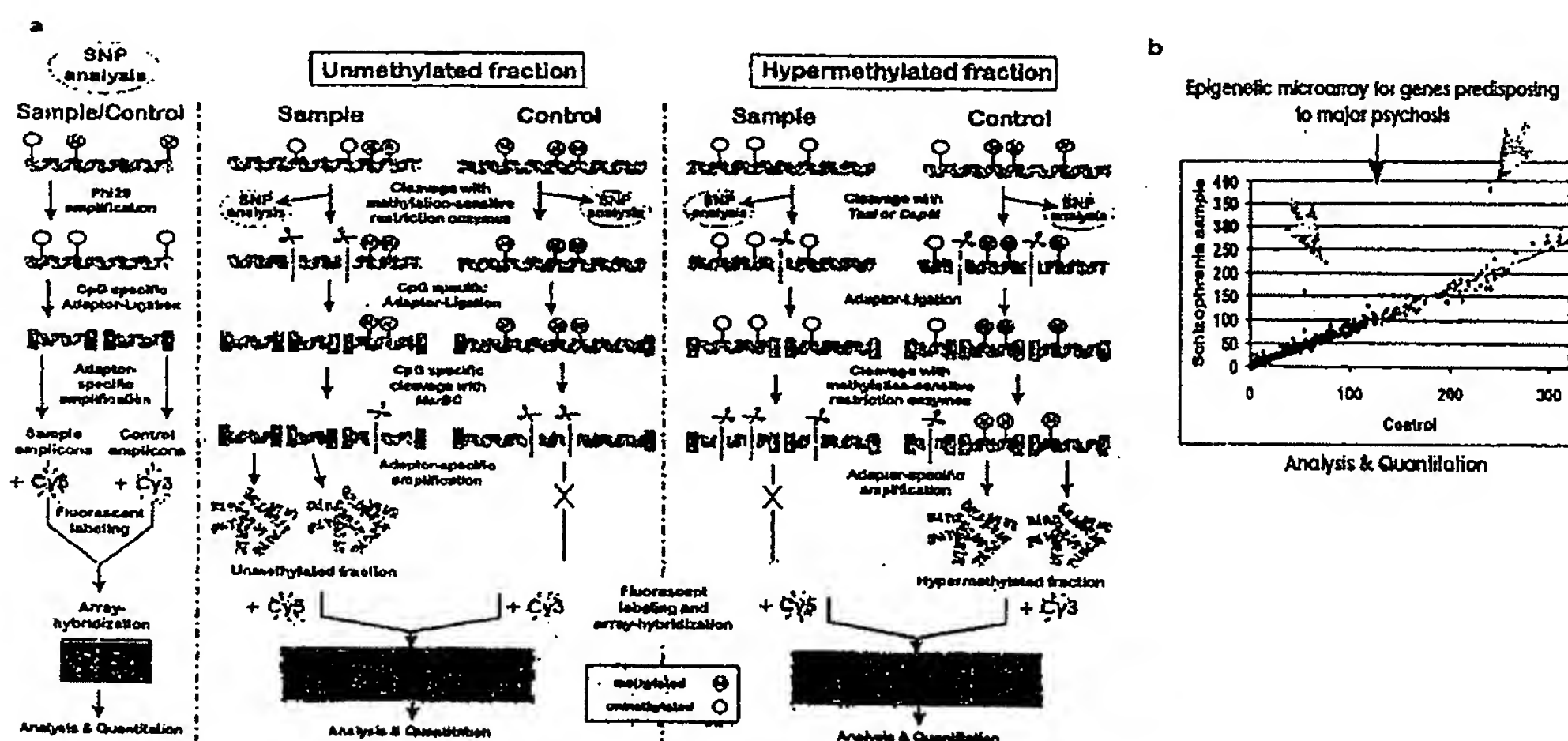
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: CpG-AMPLICON AND ARRAY PROTOCOL



(57) Abstract: The invention can be summarized as follows. There is provided a method for amplifying hypomethylated genomic nucleotide sequences and/or hypermethylated genomic nucleotide sequences and comparing the methylation state between different samples, for example control and test samples. Also disclosed is a microarray based method for analysing hypo and/or hypermethylated genomic nucleotide sequence. Further, kits comprising reagents for practising the method are provided.